

In most years displayed, Montana's age-adjusted mortality rates for many of the chronic diseases displayed--heart disease, cancer, nephritis, and chronic liver disease and cirrhosis--were lower than those for the U.S. These underlying causes accounted for just over half of all deaths of Montanans in 1999.

Montana's rates for cerebrovascular disease, pneumonia and influenza, and diabetes showed inconsistent relationships with the U.S. rates. For example, Montana's death rates for pneumonia and influenza, and diabetes were higher than those of the U.S. in four of the nine years for which comparisons are shown. Montana's rates for cerebrovascular disease were higher than those of the U.S. for seven of the nine years.

The state rate for chronic lower respiratory disease (CLRD)--which includes bronchitis, chronic and unspecified emphysema, and asthma--was higher than that for the U.S. in all years displayed. Montana's Alzheimer's rate was virtually the same as that of the U.S. in 1997, but higher in all other years.

Montana's rates for the traumatic causes of death displayed, accidents (both motor vehicle and non-motor-vehicle) and suicide, were higher than those for the nation in all years displayed.

It is also instructive to examine the change in Montana's rates over time. These graphs show reductions in Montana's rates for heart disease, cancer, and chronic liver disease and cirrhosis for this ten-year period. The rates for CLRD and nephritis are on the increase, although the trends are somewhat inconsistent. There seems to be no clear trend for the other causes of death.

AGE, SEX, AND RACE

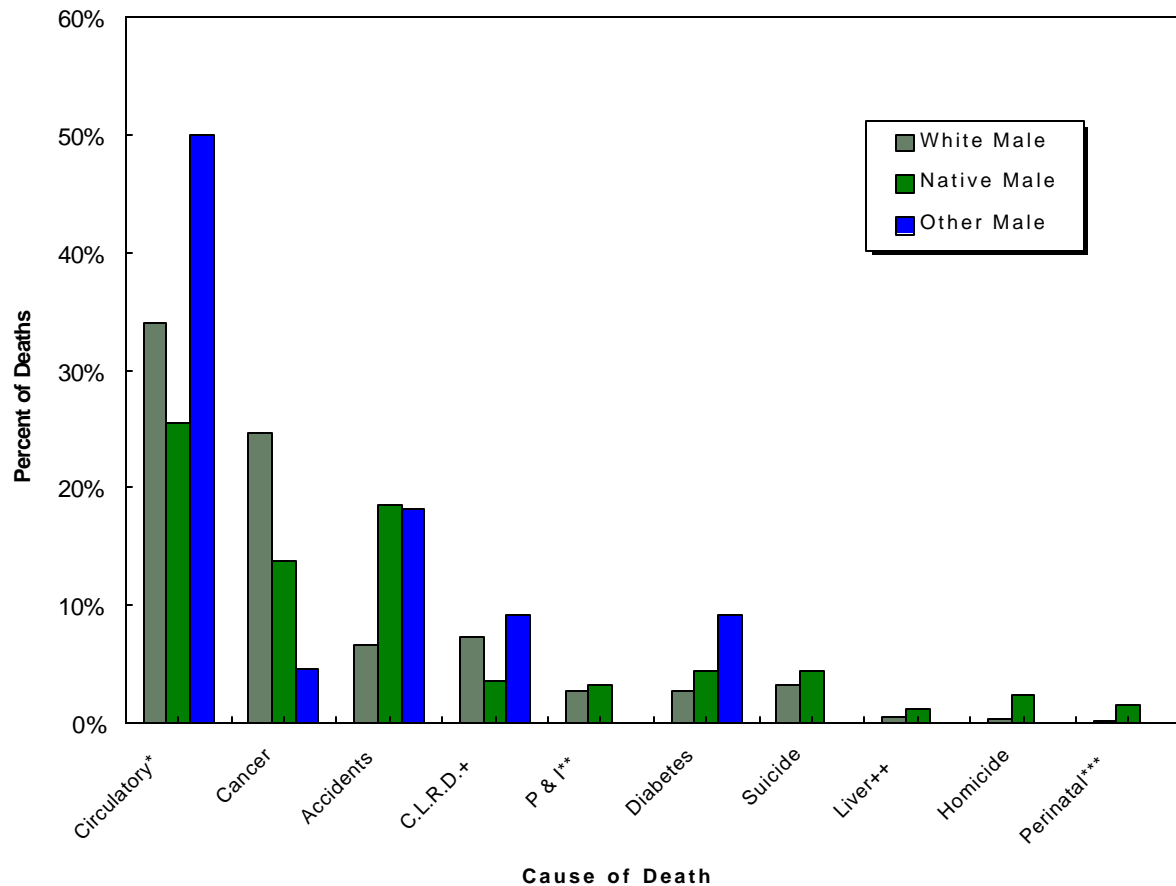
Cause of death is age, sex, and race-dependent. Heart disease and cancer were, in 1999, and have been for years, the first and second leading causes of death in Montana, claiming the largest numbers of persons of all races and both sexes. Females dying of heart disease tended to be older than males, although this disparity tended to diminish after the age of 49. After 55 years of age, the proportion of women who died from heart disease was essentially the same as that for men. Persons less than 50 years old who died of cancer were most often women; those older than 50 were most often men. The majority of cancer deaths occurred after the age of 55 for both sexes.

The frequency of Montana resident deaths by cause, sex, and age is shown in **Table 9** for all causes of death, listed by ICD-10 category. **Figure 48** shows the percent distribution for almost four-fifths of these deaths by cause, race and sex categories.

When shown as a proportion of all 1999 deaths, circulatory system diseases were the leading cause of death for all races and sexes. Specifically, 34.0 % of white males, 36.8 % of white females, 25.6 % of Native American males, and 22.3 % of Native American females died of diseases of the circulatory system--primarily heart disease, cerebrovascular disease and atherosclerosis. One-quarter of white male decedents and one-fifth of white female decedents died of cancer. Comparable proportions were 13.8 % and 18.9 % for Native American males and females, respectively. Accidents were the third leading cause of deaths for Native American males, and led to 18.5 % of their deaths; the proportions of deaths from this cause were much smaller for Native American females (9.7 %), white females (3.6 %), and white males (6.7 %).

Figure 48

**PERCENT DISTRIBUTION OF DEATHS BY SELECTED CAUSE AND RACE
MALE MONTANA RESIDENTS, 1999**



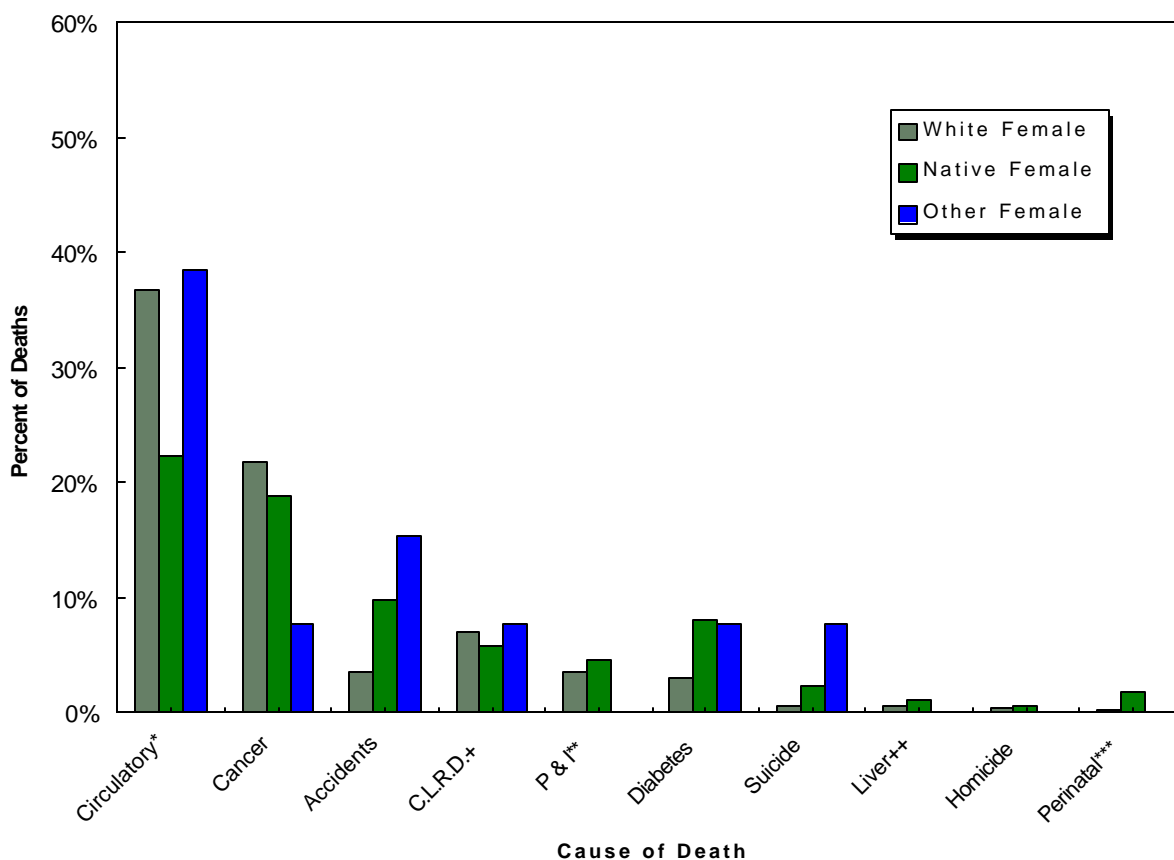
- * Diseases of the Circulatory system
- + Chronic Lower Respiratory Disease (CLRD)
- ** Pneumonia and Influenza
- ++ Chronic Liver Disease and Cirrhosis
- *** Certain Conditions Originating in the Early Infancy (Perinatal Period)

Homicide, suicide, chronic liver disease and cirrhosis, and conditions originating in early infancy did not constitute a large percentage of deaths in any of the groups, but the distribution between races and sexes is of interest. The proportion of deaths from homicides was highest for Native American males (2.4 %). This percentage was eight times as great as those for white males and females and four times that for Native American females. Three and two-tenths percent of white male decedents committed suicide. This proportion is 2.3 % for Native American females, 4.3 % for Native American males and 0.6 % for white females.

Only about one-half of one percent of white male and white female decedents died of chronic liver disease and cirrhosis. These proportions were more than twice the size for Native American males (1.2 %) and females (1.1 %), respectively. For Native American males and females, respectively, 1.6 % to 1.7 % of the decedents died of conditions originating in the perinatal period; corresponding proportions for white decedents were about one-eighth as large.

Figure 49

**PERCENT DISTRIBUTION OF DEATHS BY SELECTED CAUSE AND RACE
FEMALE MONTANA RESIDENTS, 1999**



- * Diseases of the Circulatory system
- + Chronic Lower Respiratory Disease (CLRD)
- ** Pneumonia and Influenza
- ++ Chronic Liver Disease and Cirrhosis
- *** Certain Conditions Originating in the Early Infancy (Perinatal Period)

Those who died of heart disease were most likely men older than age 35. Accident victims in 1999 were most likely to be men in their late teens to early twenties or in their early forties. The Montana resident committing suicide was likely to be a man, between 40 and 54, using a firearm. Montana resident homicide victims were most likely to be males. Nearly 60 % of the homicides involved use of a firearm.

Table 9 also shows the frequency and percent distribution of accidental deaths of Montanans by age at death and type of accident. Motor vehicle accidents accounted for the majority of accidental deaths for those from 10 to 64 years of age and for more than one-third of the accidental deaths of younger children.

Figure 50 displays the leading causes of death by age for Montana residents. In 1999, sudden infant death syndrome, conditions originating in early infancy (the neonatal period), and congenital anomalies, accounted for two-thirds of the infant deaths. Congenital anomalies were the leading cause of death in the “under one year” age category (26.8 %). Accidents (38.5 %) were the leading cause of death for decedents aged 1 to 4 years.

Less than one and one-half percent of Montana decedents were 14 years of age or younger in 1999, with accidents accounting for just over a quarter of those deaths. More than seven and one-half percent of Montana’s decedents were age 44 or younger; accidents accounted for slightly more than one-third of deaths in that age group. Suicide constituted the second leading cause of death for the age category 15 to 44 (18.2 %).

Cancer, followed by heart disease, was the leading cause of death for all of the age categories between 45 and 74. However, for the age categories 75 and older, heart disease was the leading cause, with cancer second.

For the all age category, heart disease (25.2 %) was the leading cause of death, followed closely by cancer (22.8 %). Cerebrovascular disease (7.3 %), CLRD (7.0 %), and accidents (5.7 %) were a distant third, fourth, and fifth, respectively. Table 24 shows the frequency and crude rate of death for Montana’s ten leading causes of death. Frequencies and rates are shown for Montana and each of its counties.